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EXAMINER

ROY, SIKHA

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

The Amendment, filed on September 2, 2008 has been entered and acknowledged by the Examiner.

New claims 16,17 have been entered.

The new title has been entered and approved by the Examiner.

Claims 1, and 4-17 are pending in the instant application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 5-7, 10 - 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-190150 to Hoshizaki et al. (of record), and further in view of EP 0948030 to Shimokawa et al.

Regarding claim 1 Hoshizaki discloses (Fig. 4 para [0018]-[0020]) a discharge lamp comprising an airtight container 1 filled with discharge medium mainly noble gas, a first electrode 10 provided in the air tight container, a second electrode 3 that includes an opening through which light emitted from the airtight container is emitted, is formed inside an insulator holder (discharge container supporter) 2 and thus provided to have predetermined interval to the airtight container, the insulator (made of hard plastic) holder 2 externally attached to the airtight container and includes a penetration hole to

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which the airtight container is inserted, the second electrode 3 is fitted with the insulating holder.

Hoshizaki is silent about the second electrode including a reflective surface.

Shimokawa in same field of endeavor discloses ([0032], [0069]) a discharge lamp comprising a discharge vessel including an internal electrode and a second external electrode, formed of reflective aluminum thus increasing the amount of light emitted from the aperture and in a specific direction.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the second electrode of Hoshizaki include reflective surface as suggested by Shimokawa for increasing the amount of light emitted and in a specific direction.

Regarding claim 5 Hoshizaki discloses the holder formed of hard plastic is formed to have the same length as that of the airtight container. Hoshizaki does not expressly disclose the holder being transparent. Shimokawa discloses the insulating holder made of transparent material [0045]). Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to use transparent insulating holder for holding the airtight container of Hoshizaki since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use.

Regarding claim 6 Hoshizaki discloses the second electrode 3 is buried inside the insulating holder 2.

Regarding claim 7, Hoshizaki as modified by Shimokawa discloses all the limitations same as of claim 1. Hoshizaki discloses the external electrode formed inside the insulating holder and hence is buried in it. Shimokawa discloses ([0032]) a reflecting member including an opening through which light is emitted and provided with the second electrode for increasing the amount of light emitted from the lamp.

Regarding 'the reflection member externally provided to the second electrode' the examiner notes that it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the reflective film outside of the buried second electrode (from inside as disclosed by Shimokawa) since it has been held that rearranging parts of an invention involves only routine skill.

Regarding claim 10 and 11 Hoshizaki discloses (Fig. 4) the holder includes an empty section that is provided at a side at which light is emitted from the airtight container 1 and that has a width smaller than the outer diameter of the container.

Regarding claims 12 and 13, Hoshizaki discloses the claimed invention except for the limitation of predetermined interval between the second electrode and the container in a range from 0.1 mm to 2.0 mm at the shortest. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to one having ordinary skill in the art at the time the invention was made to provide the interval in the range of 0.1 mm to 2.0 mm so that the lamp provides adequate luminescence with a low operational voltage, thus reducing

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operational noise, since optimization of workable ranges is considered within the skill of the art.

Regarding claims 14 and 15 Hoshizaki discloses the discharge medium includes xenon gas and a fluorescent medium is layered on the inner circumference of the airtight container.

Claims 8 and 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 5-190150 to Hoshizaki et al. (of record), EP 0948030 to Shimokawa et al. and further in view of USPN 6,796,678 to Moon.

Regarding claims 8 and 9 Hoshizaki discloses one holder with opening and corners at a side at which light is emitted from the airtight container is joined. Hoshizaki is silent about the plurality of holders arranged to be parallel to one another and corners at a side at which light is emitted from the airtight container are joined.

Moon in same field of endeavor discloses (Figs. 5C, 13) a plurality of holders 42c arranged parallel to each other and parallel airtight containers passing through them and plurality of holders are arranged at corners at a side at which light is emitted from the airtight container are joined. Moon teaches this provides simplified assembling of the light emitting device.

Therefore it would have been obvious to one of ordinary skill in the art at the time of invention to modify the holder of one airtight container of Hoshizaki to plurality of holders arranged parallel to each other and corners at a side at which light is emitted

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from the airtight container are joined as suggested by Moon for providing a simplified assembly of the light emitting device.

Allowable Subject Matter

Claims 4, 16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 4 the prior art of record does not teach or suggest the combination of limitations as claimed and specifically the length a of the insulating holder in a direction along which the airtight container is inserted is determined such that a relation between length a_1 at a side from which the airtight container emits light and length a_2 at a side at which the second electrode is provided is $a_1 < a_2$.

Regarding claim 16 the prior art of record does not teach or suggest the combination of limitations as claimed and specifically the at least one insulating holder includes a protrusion at a position where the second electrode is provided.

Claim 17 would be allowable because of its dependency status from claim 16.

Response to Arguments

Applicant's arguments with respect to claim 7 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sikha Roy whose telephone number is (571) 272-2463. The examiner can normally be reached on Monday-Friday 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimeshkumar D. Patel can be reached on (571) 272-2457. The fax phone number for the organization is (571) 273-8300.

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you have questions on access to the Private PAIR system contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sikha Roy/

Primary Examiner, Art Unit 2879